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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,116

08/30/2006

Jacques Thomasset

2590-165

7734

23117

7590

06/12/2008

NIXON & VANDERHYE, PC

901 NORTH GLEBE ROAD, 11TH FLOOR

ARLINGTON, VA 22203

EXAMINER

KASHNIKOW, ERIK

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/591,116

**Applicant(s)**

THOMASSET, JACQUES

**Examiner**

ERIK KASHNIKOV

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/30/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-854/IC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 08/30/2006, 02/02/2007

## **DETAILED ACTION**

### ***Drawings***

1. Figure 15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Objections***

2. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 uses composed of language, which is limiting, and describes whereas claim 3 uses comprising and characterized by, both considered to be open language (MPEP 2111.03) and also adds additional layers and further expands the barrier layer, which therefore broadens the claim, and fails to further limit.

***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4 and 5 of copending Application No. 10/591,117. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the applications both require a structural resin and 2 functional or barrier resins enclosed with in the functional resin, as well as the limitation that the functional layer is less than 20% of the concentration of the article. However the instant application has requirements that the two functional layers be at least partially on top of each other, perpendicular to the wall and in separate parts of the article, where as the copending application is silent with regards to these limitations. It would be obvious to one of ordinary skill in the art at the time of the invention would be motivated to stack the layers at least partially on top of each other to add another barrier layer between the outer and inner surfaces, and therefore increase the gas barrier properties of the article. It would also be obvious to one of ordinary skill in the art at the time of the invention to stack the articles perpendicular to a wall so as to increase the area for which the gas barrier layer is covering and therefor protecting. Specifically regarding claim 4 a dose would fall under the broadest possible definition for the term object, and therefor would be considered an object, and would be covered under claim 1 of the instant application. In regards to claim 5 one would be motivated to add the extra layer in order to increase the functional properties of said object.
5. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 1 directed to an invention not patentably distinct from claim 4 of commonly assigned 10/591117. Specifically, see above paragraph.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/591,117, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

6. Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/591,127. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the instant application requires 2 functional layers the copending application only requires at least one. The term at least one allows for their to be two or more possible barrier layers, and one of

Art Unit: 1794

ordinary skill in the art at the time of the invention would be motivated to include an extra functional layer, such as a barrier layer so as to increase the barrier properties of the article. Also the instant application has requirements that the two functional layers be at least partially on top of each other, perpendicular to the wall and in separate parts of the article, where as the copending application is silent with regards to these limitations. It would be obvious to one of ordinary skill in the art at the time of the invention would be motivated to stack the layers at least partially on top of each other to add another barrier layer between the outer and inner surfaces, and therefore increase the gas barrier properties of the article. It would also be obvious to one of ordinary skill in the art at the time of the invention to stack the articles perpendicular to a wall so as to increase the area for which the gas barrier layer is covering and therefor protecting. The instant application has requirements regarding the amount of the first resin layer present in the object, whereas the copending application is silent in this regard. However it has been shown that absent a showing of criticality with respect to "concentration of the resin" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "resin concentration" through routine experimentation to values, including those presently claimed in order to achieve "a structurally stable object". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The copending application has requirements regarding the distance from the surface of the does (which can also be considered an object) whereas the instant application is silent in this regard.

It has been determined that absent a showing of criticality with respect to "distance from the wall" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "distance from the wall" through routine experimentation to values, including those presently claimed in order to achieve "multilayer object with functional properties (i.e. barrier properties)". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Examiner also points out that a dose is falls under the broadest possible definition for the term object, and therefore would fall under the scope of the claims of the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. Claim 2 recites the limitation "superposition distance" in the second line. There is insufficient antecedent basis for this limitation in the claim.
10. Examiner is aware as to what Applicant's are claiming, but the language makes it unclear and therefore requires correction.



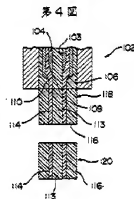
**Claim Rejections - 35 USC § 103**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415).

13. In regards to claim 1 Examiner points out that the term "composed of" is treated similar to "consisting essentially of" or "consisting of"(MPEP 2111.03 and AFG Industries, Inc. v. Cardinal IG Company, 239 F.3d 1239,1245, 57 USPQ2d 1776, 1780-81 (Fed. Cir. 2001).



14. In regards to claim 1 and 4 Kawaguchi et al. teach a multilayer structural molded material comprising a synthetic resin material with an inside and outside layer(116), with the outside layer surrounding the inside layer(114)(Abstract). Figure 4 shows an embodiment of this invention wherein there are two inner layers (114 and 104), and the article contains an axis of symmetry (down the middle of the drawing). One can see from the drawing that the layers are partially one on top of each other and perpendicular to the wall on top (the wall parallel to the top of the page).

15. It is recognized by Examiner that Kawaguchi et al. are silent with regards to the concentrations of the layers, however it is pointed out that absent a showing of criticality

with respect to "concentrations of the structural component" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the concentration of the "structural component" through routine experimentation to values, including those presently claimed in order to achieve "tough and stable article". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415) in view of Akiyama et al. (US 2002/0182351).

17. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within. However they are silent regarding the functional resin being a layer comprising an adhesive layer / a barrier layer / an adhesive layer.

18. Akiyama et al. teach an article which has a barrier layer (the functional layer) embedded within (paragraph 0044 and Fig. 7). Akiyama et al. further teach that the barrier layer is actually a barrier layer in between two adhesive layers (paragraph 0106).

19. One of ordinary skill in the art at the time of the invention would be motivated to modify the article of Kawaguchi et al. with that of Akiyama et al. because the layer of Akiyama et al. offers firm adherence between the two films (paragraph 0061).

***Allowable Subject Matter***

20. The following is a statement of reasons for the indication of allowable subject matter in regards to claims 5-8: While the prior art teaches articles with two functional layers embedded therein, they are silent regarding the distances between the two layers and the axis of symmetry.

***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stewart (US 4,921,647) teaches an article which contains a structural resin layer as well as 2 functional layers in between, however Stewart is silent regarding the concentrations as well as the functional layers being imprisoned within the structural resin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (Second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow  
Examiner  
Art Unit 1794

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1794